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CCITT Group I, II, and III Equipment.

## Comments 6/23/89 Draft of OUFS Supplement for Cherokee County/Galena Subsite

## 1. Insert (in lieu of last paragraph) pg. 1-9.

The potential hazards to public health and the environment were further evaluated subsequent to completion of the 1988 OUFS. Issues relating to cleanup levels and waste volumes requiring remediation have been a principle focus in the effort to assess the viability of alternatives.

The principle contaminant of concern at the Cherokee County site is lead. In an effort to establish an action level for lead, EPA and ATSDR guidance for the health risks associated with ingestion of soils (direct contact does not present a health risk) located in a residential setting were considered. Subsequently, an EPA action level for lead was established for mine wastes and waste-contaminated soils at 1,000 mg/kg or ppm for the Galena subsite.

Concerns regarding zinc concentrations have also been raised in the process of assessing newly proposed alternatives which propose to place mine waste material below the ground surface and, in instances, below the ground water table. The geochemical activity of zinc at the site is such that approximately 5,000 ppm in the mine wastes material under study is a level of concern. Zinc will leach to ground water and above the level of concern may pose a risk to aquatic life.

Both lead and zinc have been characterized at the site using a portable x-ray fluorescence (XRF) spectrometer, as described in the post OUFS studies section of this supplement. The XRF analyses have closely compared to laboratory analysis of mine wastes for lead and zinc. Use of the XRF and its results have promoted easier mine waste characterization and provided a means to assess the level of concern presented by individual piles or areas.

Though similar health concerns exist at the site for cadmium, it is not easily detected by the XRF at the concentrations present onsite. Available data using the XRF and laboratory analysis indicate zinc is associated with cadmium at an average ratio of approximately 220:1 e.g., at 5,000 ppm zinc, the approximate cadmium concentration would be 23 ppm. This relationship between zinc and cadmium supports using the XRF to further characterize wastes and the level of concern for zinc as a conservative level of concern for cadmium.

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2. Insert (Idea at least) pg. 2-26.

Characterization and Disposal of Chat

The chat lead content is not a controlling factor for placement below grade since the onsite chat has been highly processed rendering the remaining lead content geochemically inactive in the acidic ground water environment. However, zinc at levels above 5,000 will not be placed below the water table due to its geochemically active nature.

Delete or put in separate sentence/paragraph comparison to "Waste Rock".

Pg. 2-11, top paragraph - one sentence.

This sentence is unclear. What does "not impact tailing disposal" mean?

Figure 2-7 - Hi Zn.

Delete above grade disposal.

Pg. 3-4, first bullet.

Third sentence should read, "are considered to have a potentially adverse".

6. Pg. 3-5.

Fifth bullet should read, "Because of the Bevill Amendment, Subtitle C RCRA considerations have been assumed to be inapplicable" etc.

7. Pg. 3-14, 3-18, 3-22 and 3-25.

Compliance with ARARs first sentence, delete "(Ambient Water Quality Criteria)."